ROY COOPER
*Governor*

MICHAEL S. REGAN
*Secretary*

MICHAEL ABRACZINSKAS
*Director*

NORTH CAROLINA
*Environmental Quality*

DRAFT
XXX XX, 2020

Mr. Philip Sisler
Feedmill Manager
Perdue Agribusiness, LLC
242 Perdue Road
Cofield, North Carolina 27922

SUBJECT: Air Quality Permit No. 02875T33
Facility ID: 4600082
Perdue Agribusiness, LLC - Cofield
Hertford County
Fee Class: Title V
PSD Class: Minor

Dear Mr. Sisler:

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit received December 27, 2018, we are forwarding herewith Air Quality Permit No. 02875T33 to Perdue Agribusiness, LLC. 242 Perdue Road, Cofield, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Hertford County has triggered increment tracking under PSD for $PM_{10}$. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from ***(Enter Permit Issuance Date)*** until ***(Enter Permit Expiration Date)***, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Alice M. Wessner at (919) 707-8452 or by email at alice.wessner@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Kelly Fortin, EPA Region 4 (electronic copy only)
Washington Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Permit No. 0275T33

Insignificant Activities per 15A NCAC 02Q .0503(8)

| Emission Source ID No. | Emission Source Description |
|---|---|
| IES13 | Central vacuum system in soybean plant with one bagfilter (34 square feet of filter area) and HEPA filter (ID No. ICD13) |
| IES19.1 through IES19.3 | Three mechanical storage tanks with three vents each equipped with one collapsible sock filter |
| IES19.4 and IES19.5 | Two mechanical storage tanks with two vents each equipped with one collapsible sock filter |
| IES19.6 | One hull storage tank equipped with one collapsible sock filter |
| IES26B<br>IES26C<br>IES26D | Grain receiving storage tanks |
| IES27A<br>IES27B<br>IES27C<br>IES27D | Soybean and corn work silos (30K bushels, grain receiving)<br>Soybean and corn work silos (30K bushels, grain receiving)<br>Soybean and corn work silos (30K bushels, grain receiving)<br>Wet tank (50K bushels, grain receiving) with collapsible filter |
| IES30 | Pellet storage tank |
| IES31A<br>IES31B | Junior tank<br>Weed seed silo |
| IES33 | Bean conditioner |
| IES34A<br>IES34B<br>IES34C | Poultry Meal Silos |
| IES36 | Parts cleaning tank in garage |
| IES37 | Garner grain scale |
| IES39 | 15,000 gallon hexane storage tank |
| IES40 | 15,000 gallon hexane storage tank |
| IES41 | Small cooling tower with 40 gpm well water |

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

# Summary of Changes to Permit

The following changes were made to the Perdue Agribusiness, LLC. – Cofield, Air Permit No. 02875T32:

| Page No. | Section[1] | Description of Changes |
|---|---|---|
| Cover Letter | Cover Letter | • Updated permit revision and dates |
| Cover Letter Attachment | Insignificant Activities List and Summary of changes to permit | • Changed IES38 (wet 50K bushel tank) to IES27D Wet tank (50K bushels, grain receiving) with collapsible filter and added it to the section with IES27A, B and C<br>• Changed name of Weed seed silo (31A) to Junior Tank<br>• Added IES39 15,000 gallon hexane storage tank<br>• Added IES40 15,000 gallon hexane storage tank<br>• Added IES41 Small cooling tower with 40gpm well water<br>• Updated Summary of changes to permit for current permit renewal |
| 3, 4 | 1, Table Permitted Emission Source(s) and Associated Air Pollution Control Device(s) | • Deleted Emission Source ESB3<br>• Deleted reference to .1109 Case by Case MACT and replaced with MACT DDDDD for Sources ESB4 and ESB5<br>• Deleted reference to No. 6 fuel oil for Source ESB5<br>• Moved Soybean meal storage tanks ES26A and ES26E from Soybean Plant to Grain Receiving |
| 5 | 2.1 A | • Moved Soybean meal storage tanks ES26A and ES26E from Soybean Production Process Sources to Grain Receiving Sources<br>• Removed Section 2.1 A and renumbered remaining sections. Deleted language for Emission Source ESB3 |
| 8 | 2.1 B | • Deleted reference to 15A NCAC 02D .0958 |
| 12 | 2.1 C | • Deleted reference to 15A NCAC 02D .0958 |
| 14 | 2.1 D | • Deleted reference to 15A NCAC 02D .1109<br>• Added reference to MACT DDDDD |
| 16 | 2.1 E | • Deleted reference to No. 6 fuel oil and saleable animal fat<br>• Deleted reference to 15A NCAC 02D .1109<br>• Added reference to MACT DDDDD |
| 16 | 2.1 E.1<br>2.1.E.1.a<br>2.1 E.1.c | • Deleted reference to No. 6 fuel oil and saleable animal fat |
| 16 | 2.1 E.2.a | • Deleted reference to saleable animal fat |
| 17 | 2.1 E.3.a<br>2.1 E.3.c | • Deleted reference to saleable animal fat |
| 17 | 2.1 E.4.c, f and g | • Deleted reference to No. 6 fuel oil |

| Page No. | Section[1] | Description of Changes |
|---|---|---|
| 18 | 2.1 E.4.h | • Deleted 2.1 E.4.h.i and combine paragraph |
| 18 | 2.1 E.4.i | • Deleted 2.1 E.4.i.i and combine paragraph |
| 18 | 2.1 E.4.j | • Deleted reference to No. 6 fuel oil |
| 18 | 2.1 E.4.k.ii | • Deleted reference to keeping records for 30-day average sulfur content. Renumbered condition. |
| 18 | 2.1 E.4.l | • Deleted reference to No. 6 fuel oil and saleable animal fat |
| 19 | 2.1 E.4.m and p | • Deleted reference to No. 6 fuel oil |
| 19 | 2.1 E.5.c | • Deleted reference to No. 6 fuel oil |
| 20 | 2.1 E.6.c and d | • Deleted condition and renumbered remaining sections |
| 20 | 2.1 E.6.e and h | • Deleted reference to No. 6 fuel oil |
| 20 | 2.1 E.6.g | • Deleted reference to salable animal fat |
| 20, 21 | 2.1 E.7.c, d, e and f | • Deleted reference to No. 6 fuel oil and saleable animal fat |
| 26 | 2.2 A | • Deleted reference to 15A NCAC 02D .0958 |
| 26 | 2.2 A.1 | • Removed Section 2.2 A.1 and renumbered remaining sections |
| 26 | 2.2 A.1.a.ii | • Deleted reference to Boiler ESB3 |
| 28 | 2.2 A.4.c, d and e | • Deleted reference to No. 4. And No. 6 fuel oil as well as references to thresholds of amounts burned |
| 29 | 2.2 A.7 | • Deleted 15A NCAC 02Q .0711 as per Permittee |
| 30-41 | 2.2 B.1 | • Added Section 2.2 B.1 and renumbered subsequent paragraphs and section references within Section 2.2.B.1<br>• Removed all references to ES26A and ES26E |
| 42 | 2.2 C | • Deleted reference to ESB3<br>• Deleted reference to No. 6 fuel oil and saleable animal fat<br>• Deleted references to 15A NCAC 02D .1109<br>• Added reference to MACT DDDDD |
| 42-44 | 2.2 C.1 | • Deleted 15A NCAC 02D .1109 and replaced with 15A NCAC 02D .1111 |
| 45 | 2.3 | • Section deleted. No longer needed. |
| 46-54 | 3 | • Updated General Conditions to most recent version |
| 55 | ATTACHMENT | • Updated General Conditions to most recent version |

[1] Sections listed in this column represent section numbers from Permit 02875T32

State of North Carolina
Department of Environmental Quality
Division of Air Quality

# AIR QUALITY PERMIT

| Permit No. | Replaces Permit No.(s) | Effective Date | Expiration Date |
|---|---|---|---|
| 02875T33 | 02875T32 | XXXX* | XXXX** |

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

## Permittee: Perdue Agribusiness, LLC - Cofield

**Facility ID:** **4600082**

**Facility Site Location:** **242 Perdue Road**
**City, County, State, Zip:** **Cofield, Hertford, North Carolina, 27922**

**Mailing Address:** **242 Perdue Road**
**City, State, Zip:** **Cofield, North Carolina, 27922**

**Application Number:** **4600082.19A**
**Complete Application Date:** **December 27, 2018**

**Primary SIC Code:** **2048, 2075, 5153**
**Division of Air Quality, Regional Office Address:** **Washington Regional Office**
**943 Washington Square Mall**
**Washington, North Carolina 27889**

Permit issued this the XX day of XXX, 2020

_____
William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

# SECTION 1- PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

| Page Nos. | Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description |
|---|---|---|---|---|
| **Feed Mill** | | | | |
| 11, 12, 22, 36, 39 | ESB4 **MACT DDDDD** | One natural gas/No. 2 fuel oil/diesel fuel-fired rental boiler (89.8 million Btu per hour maximum heat input capacity) with low-NOx burners | NA | NA |
| 12 -17, 21, 36 | ESB5 **NSPS Dc; MACT DDDDD** | One natural gas/No. 2 fuel oil-fired boiler (61.2 million Btu per hour maximum heat input capacity) with low-NOx burners | NA | NA |
| 17-20 | ES33 **(NSPS, IIII; MACT ZZZZ)** | One diesel fuel-fired emergency fire engine (197 bhp) – equipped with a diesel particulate filter | NA | NA |
| 6-9 | ES2 | Receiving truck dump pit | CD2 | One bagfilter (1,300 square feet of filter area) |
| 6 | ES3 | Receiving rail dump pit | CD2 | One bagfilter (1,300 square feet of filter area) |
| 6 | ES4 | Receiving elevator and turn head (for feed additives) | CD4 | One bagfilter (209 square feet of filter area) |
| 6 | ES5 | Two hammermills | CD5 | One bagfilter (651 square feet of filter area) |
| 6 | ES6 | No. 1 pellet system | CD6A CD6B | Two cyclones (47 inches in diameter each) |
| 6-9 | ES7 | No. 2 pellet system | CD7A CD7B | Two cyclones (47 inches in diameter each) |
| 6-9 | ES10A | Feed loadout | NA | NA |
| 6-9 | ES30A | Finished feed loadout | NA | NA |
| 6-9 | ES29 | Corn day tank | NA | NA |
| **Grain Receiving** | | | | |
| 6-9 | ES22 | Grain receiving (dump hopper), truck loadout and railcar loadout | CD22 | One bagfilter (2,185.4 square feet of filter area) |
| 6-9 | ES22B | Grain receiving (dump hopper), truck loadout and railcar loadout | CD22B | One bagfilter (2,187 square feet of filter area) |

| Page Nos. | Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description |
|---|---|---|---|---|
| 6-9<br>21 | ES23<br><br><br><br><br>ES32A | 84 tons per hour direct-fired propane/natural gas-fired grain dryer (22 million Btu per hour maximum heat input capacity)<br><br>Scalper | CD23A<br><br>CD23B | Two screens<br><br>One cyclone (60 inches in diameter) |
| 6-9<br>21 | ES24<br><br><br><br><br>ES32B | 84 tons per hour direct-fired propane/natural gas-fired grain dryer (22 million Btu per hour maximum heat input capacity)<br><br>Scalper | CD24A<br><br>CD24B | Two screens<br><br>One cyclone (60 inches in diameter) |
| 6-9 | ES26A<br>ES26E | Two soybean meal storage tanks | NA | NA |
| 6-9 | ES28 | Corn tank | NA | NA |
| **Soybean Plant** | | | | |
| 6-9<br>21, 24-35 | ES12<br>**MACT GGGG** | Soybean meal cooler/dryer unit | CD12A<br>CD12B<br>CD12C | Three cyclones (78 inches in diameter each) |
| 6-9<br>24-35 | ES14<br>**MACT GGGG** | Soybean preparation process | CD14A<br>CD14B<br><br>CD14C | Two cyclones (75 inches in diameter each)<br><br>One bagfilter (2,960 square feet of filter area) |
| 6, 24 | ES15<br>**MACT GGGG** | Meal grinding and screening process | CD15 | One bagfilter (2,474 square feet of filter area) |
| 6-9, 24 | ES16<br>**MACT GGGG** | Hull grinding process | CD16B* | One bagfilter (10:1 air-to-cloth ratio) |
| 10, 21, 24 | ES17<br>**MACT GGGG** | Vapor recovery system on the hexane application process (final vent) | NA | NA |
| 10, 22, 24 | ES17A<br>**MACT GGGG** | Soybean extraction process (fugitive emissions) | NA | NA |
| 6-9, 24-35 | ES18<br>**MACT GGGG** | Flaking rolls aspiration system | CD18 | One cyclone (62 inches in diameter) |
| 6-9, 24-35 | ES20<br>**MACT GGGG** | Soybean meal storage tank with four loadouts | CD20A | One bagfilter (4,000 square feet of filter area) |

| | | | | |
|---|---|---|---|---|
| 6-9<br>24-35 | ES21<br>**(MACT GGGG)** | Whole soybean storage tank | CD21 | One bagfiler (45 square feet of filter area) |

# SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

## 2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

**A. FEED MILL SOURCES:**
**Receiving truck dump pit (ID No. ES2) and Receiving rail dump pit (ID No. ES3) with associated bagfilter (ID No. CD2)**
**Receiving elevator and turn-head (ID No. ES4) with associated bagfilter (ID No. CD4)**
**Two hammermills (ID No. ES5) with associated bagfilter (ID No. CD5)**
**No. 1 pelleting system (ID No. ES6) with associated parallel cyclones (ID Nos. CD6A and CD6B)**
**No. 2 pelleting system (ID No. ES7) with associated parallel cyclones (ID Nos. CD7A and CD7B)**
**Feed loadout (ID No. ES10A)**
**Finished feed loadout (ID No. ES30A)**
**Corn day tank (ID No. ES29)**

**GRAIN RECEIVING SOURCES:**
**Grain receiving (dump hopper), truck loadout, and railcar loadout operations (ID No. ES22) with associated bagfilter (ID No. CD22)**
**Grain receiving (dump hopper), truck loadout and railcar loadout operations (ID No. ES22B) with associated bagfilter (ID No. CD22B)**
**One direct-fired natural gas/propane-fired grain dryer (ID No. ES23) and scalper prior to the dryer (ID No. ES32A) with associated screens (ID No. CD23A) in series with one cyclone (ID No. CD23B)**
**One direct-fired natural gas/propane-fired grain dryer (ID No. ES24) and scalper prior to the dryer (ID No. ES32BA) with associated screens (ID No. CD24A) in series with one cyclone (ID No. CD24B)**
**Corn tank (ID No. ES28)**
**Soybean meal storage tanks (ID Nos. ES26A and ES26E)**

**SOYBEAN PRODUCTION PROCESS SOURCES:**
**Soybean meal cooler/dryer unit (ID No. ES12) with associated parallel cyclones (ID Nos. CD12A through CD12C)**
**Soybean preparation process (ID No. ES14) with associated cyclones (ID Nos. CD14A and CD14B) installed in series with one bagfilter (ID No. CD14C)**
**Meal grinding and screening process (ID No. ES15) with associated bagfilter (ID No. CD15)**
**Hull grinding process (ID No. ES16) with associated bagfilter (ID No. CD16B)**
**Flaking rolls aspiration system (ID No. ES18) with associated cyclone (ID No. CD18)**
**Soybean meal storage tank with four loadouts (ID No. ES20) with associated bagfilter (ID No. CD20A)**
**Whole soybean storage tank (ID No. ES21) with associated bagfilter (ID No. CD21)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Particulate matter | **(ID Nos. ES2 through ES7, ES10A, ES12, ES14 through ES16, ES18, ES20, ES21, ES22, ES22B, ES23, ES24, ES26A, ES26E, ES28, ES29 and ES30A)**<br>*For process rates up to 30 tons per hour:*<br>$E = 4.10 \times P^{0.67}$<br><br>*For process rates greater than 30 tons per hour:*<br>$E = 55.0 \times P^{0.11} - 40$<br>Where: E = allowable emission rate in pounds per hour<br>P = process weight rate in tons per hour | 15A NCAC 02D .0515 |
| Sulfur dioxide | **(ID Nos. ES23 and ES24 only)**<br>2.3 pounds per million Btu heat input | 15A NCAC 02D .0516 |

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Visible emissions | **(ID Nos. ES2 through ES7, ES10A, ES12, ES14 through ES16, ES18, ES20, ES21, ES22, ES22B, ES26A, ES26E, ES28, ES29 and ES30A)**<br>20 percent opacity | 15A NCAC 02D .0521 |
| Toxic air pollutants | See Section 2.2 A.1.<br>**State-enforceable only** | 15A NCAC 02D .1100 |
| Odor | See Section 2.2 A.2.<br>**State-enforceable only** | 15A NCAC 02D .1806 |
| Sulfur dioxide | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.3. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Nitrogen oxides (as $NO_2$) | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.4. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Volatile organic compounds | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.5. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Hazardous air pollutants | See section 2.2 B. | 15A NCAC 02D .1111 (40 CFR 63, Subpart GGGG) |

**1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

a. Emissions of particulate matter from the Feed Mill, Grain Receiving, and Soybean Production Process Sources **(ID Nos. ES2 through ES7, ES10A, ES12, ES14 through ES16, ES18, ES20, ES21, ES22, ES22B, ES23, ES24, ES26A, ES26E, ES28, ES29, and ES30A)** shall not exceed an allowable emission rate as calculated by the following equation:

*For process rates up to 30 tons per hour:*
$E = 4.10 \times P^{0.67}$

*For process rates greater than 30 tons per hour:*
$E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emission rate in pounds per hour
P = process weight rate in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources **(ID Nos. ES2 through ES7, ES12, ES14 through ES16, ES18, ES20, ES21, ES22, ES22B, ES23 and ES24)** shall be controlled by ten bagfilters **(ID Nos. CD2, CD4, CD5, CD14C, CD15, CD16B, CD20A, CD21, CD22 and CD22B)**, eleven cyclones **(ID Nos. CD6A, CD6B, CD7A, CD7B, CD12A through CD12C, CD14A, CD14B, CD23B and CD24B)** and two screens **(ID Nos. CD23A and CD24A)** as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer.

In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. a monthly external visual inspection of the system ductwork, bagfilters, cyclones, and screens for leaks; and
ii. an annual (for each 12-month period following initial inspection) internal inspection of the bagfilters' **(ID Nos. CD2, CD4, CD5, CD14C, CD15, CD16B, CD20A, CD21, CD22 and CD22B)** and cyclones' **(ID Nos. CD6A, CD6B, CD7A, CD7B, CD12A through CD12C, CD14A and CD14B)** structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, bagfilters, cyclones, and screens are not inspected and maintained.

d. The Permittee shall maintain production records for these sources **(ID Nos. ES10A, ES26A, ES26E, ES28, ES29 and ES30A)** such that the process rates "P" in tons per hour, as specified by the formula in Section 2.1 A.a, above, can be derived and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 of the production records are not maintained or the types of materials are not monitored.

e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

f. No reporting for particulate emissions is required from these sources **(ID Nos. ES10A, ES26A, ES26E, ES28, ES29 and ES30A)**.

g. The Permittee shall submit the results of any maintenance performed on any control device specified in Section 2.1 A.1.c, above, within 30 days of a written request by the DAQ.

h. With the exception of the source identified in Section 2.1 A.1.f, above, the Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

a. Emissions of sulfur dioxide from the grain dryers **(ID Nos. ES23 and ES24)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas/propane in these grain dryers **(ID Nos. ES23 and ES24)**.

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

a. Visible emissions from these sources **(ID Nos. ES2 through ES7, ES10A, ES12, ES14 through ES16, ES18, ES20, ES21, ES22, ES22B, ES23, ES24, ES26A, ES26E, ES28, ES29 and ES30A)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping is required for visible emissions from the firing of natural gas/propane in the grain dryers **(ID Nos. ES23 and ES24)**.

d. To ensure compliance, once a month the Permittee shall observe the emission points of these sources **(ID Nos. ES2 through ES7, ES10A, ES12, ES14 through ES16, ES18, ES20, ES21, ES22, ES22B, ES26A, ES26E, ES28, ES29 and ES30A)** for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a above.

e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

f. No reporting is required for visible emissions from the firing of natural gas/propane in the grain dryers **(ID Nos. ES23 and ES24)**.

g. With the exception of the sources identified in Section 2.1 B.3.f, above, the Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**B. The soybean oil/hexane solvent extraction process, including: Vapor recovery system on the hexane application process (final vent; ID No. ES17) and Soybean extraction process (fugitive emissions; ID No. ES17A)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Visible Emissions | 20 percent opacity | 15A NCAC 02D .0521 |
| Toxic air pollutants | See Section 2.2 A.1.<br>**State-enforceable only** | 15A NCAC 02D .1100 |
| Odor | See Section 2.2 A.2.<br>**State-enforceable only** | 15A NCAC 02D .1806 |
| Sulfur dioxide | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.3. | 15A NCAC 02Q .0317<br>(PSD Avoidance) |
| Nitrogen oxides (as $NO_2$) | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.4. | 15A NCAC 02Q .0317<br>(PSD Avoidance) |
| Volatile organic compounds | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.5. | 15A NCAC 02Q .0317<br>(PSD Avoidance) |
| Hazardous air pollutants | See Section 2.2 B. | 15A NCAC 02D .1111<br>(40 CFR 63, Subpart GGGG) |

**1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

a. Visible emissions from the soybean oil/hexane solvent extraction process **(ID Nos. ES17 and ES17A)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of the soybean oil/hexane solvent extraction process **(ID Nos. ES17 and ES17A)** for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.1.a above.

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**C. One natural gas/No. 2 fuel oil/diesel fuel-fired rental boiler (89.8 million Btu per hour maximum heat input capacity) with low-NOx burners (ID No. ESB4)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Particulate matter | 0.283 pounds per million Btu heat input (ID No. ESB4) | 15A NCAC 02D .0503 |
| Sulfur dioxide | 2.3 pounds per million Btu heat input (ID No. ESB4) | 15A NCAC 02D .0516 |
| Visible Emissions | 20 percent opacity | 15A NCAC 02D .0521 |
| Toxic air pollutants | See Section 2.2 A.1.<br>**State-enforceable only** | 15A NCAC 02D .1100 |
| Hazardous air pollutants | See Section 2.2 B.<br>Work Practice Standards | MACT DDDDD |
| Sulfur dioxide | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.3. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Nitrogen oxides (as $NO_2$) | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.4. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Volatile organic compounds | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.5. | 15A NCAC 02Q .0317 (PSD Avoidance) |

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

a. Emissions of particulate matter from this boiler **(ID No. ESB4)** into the atmosphere shall not exceed 0.283 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas/No.2 fuel oil/diesel oil in this boiler (**ID No. ESB4**).

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

a. Emissions of sulfur dioxide from this boiler **(ID No. ESB4)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas, No. 2 fuel oil, or diesel oil in this boiler (**ID No. ESB4**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

a. Visible emissions from this boiler **(ID No. ESB4)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas, No. 2 fuel oil, diesel oil in this boiler **(ID No. ESB4)**.

**D. One natural gas/No. 2 fuel oil-fired boiler (61.2 million Btu per hour maximum heat input capacity) with low-NOx burners (ID No. ESB5)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Particulate matter | 0.288 pounds per million Btu heat input when burning natural gas, No. 2 fuel oil | 15A NCAC 02D .0503 |
| Sulfur dioxide | 2.3 pounds per million Btu heat input when burning natural gas | 15A NCAC 02D .0516 |
| Visible emissions | 20 percent opacity when burning natural gas | 15A NCAC 02D .0521 |
| Particulate matter (as opacity)<br><br>Sulfur dioxide | 20 percent opacity when burning No. 2 fuel<br><br>0.5% weight sulfur in No. 2 fuel oil | 15A NCAC 02D .0524 (40 CFR 60, Subpart Dc) |
| Toxic air pollutants | See Section 2.2 A.1.<br>**State-enforceable only** | 15A NCAC 02D .1100 |
| Hazardous air pollutants | See Section 2.2 B.<br>Work Practice Standards | MACT DDDDD |
| $PM/PM_{10}$ | Less than 15 tons per consecutive 12-month period | 15A NCAC 02Q .0317 (PSD Avoidance) |
| $PM_{2.5}$ | Less than 10 tons per consecutive 12-month period | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Sulfuric acid mist | Less than 7 tons per consecutive 12-month period | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Sulfur dioxide | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.3. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Nitrogen oxides (as $NO_2$) | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.4. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Volatile organic compounds | Facility-wide less than 250 tons per consecutive 12-month period<br>See Section 2.2 A.5. | 15A NCAC 02Q .0317 (PSD Avoidance) |

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

a. Emissions of particulate matter, when burning natural gas, No. 2 fuel oil in this boiler **(ID No. ESB5)**, into the atmosphere shall not exceed 0.288 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 D.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the burning of natural gas, No. 2 fuel oil in this boiler (**ID No. ESB5**).

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

a. Emissions of sulfur dioxide, when burning natural gas in this boiler **(ID No. ESB5)**, shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from burning of natural gas in this boiler (**ID No. ESB5**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

a. Visible emissions when burning natural gas from this boiler **(ID No. ESB5)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the burning of natural gas in this boiler **(ID No. ESB5)**.

**4. 15A NCAC 02D .0524: NSPS, STANDARDS OF PERFORMANCE FOR SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS (40 CFR Part 60, Subpart Dc)**

a. For this boiler (**ID No. ESB5)**, the Permittee shall comply with all applicable provisions including the notification, testing recordkeeping, and monitoring requirements contained in Environmental Management Commission standards 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR 60, Subpart Dc, including Subpart A "General Provisions."

**Emission Limitations** [15A NCAC 02D .0524]

b. The maximum sulfur content of any fuel received and burned in the boiler (**ID No. ESB5**), shall not exceed 0.5 percent by weight. [40 CFR 60.42c(d)]

c. Visible emissions when burning No. 2 fuel oil in boiler **(ID No. ESB5)** shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)]

d. The $SO_2$ fuel sulfur standard in Section 2.1 D.4.b, above, shall apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(i)]

e. The opacity standard in Section 2.1 D.4.c, above, shall apply at all times, excluding periods of startup, shutdown or malfunction. [40 CFR 60.43c(d)]

f. Compliance with the $SO_2$ fuel oil sulfur limit in Section 2.1 D.4.b, above, shall be based upon 30-day rolling average basis, when firing No. 2 fuel oil. [40 CFR 60.42c(g)]

**Testing** [15A NCAC 02Q .0508(f)]

g. The Permittee shall conduct performance testing (when requested) for the boiler (**ID No. ESB5**) to demonstrate compliance with the opacity limit when burning No. 2 fuel oil in Section 2.1 D.4.c, above. The Permittee shall conduct the opacity testing in accordance with General Condition JJ found in Section 3 and using Method 9 of Appendix A-4 of Part 60 for opacity limits. [40 CFR 60.45c(a)(8)]

If the results of performance testing (when requested) are above the opacity limit in Section 2.1 D.4.c, above, or the performance testing (when requested) is not conducted, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

h. The Permittee shall comply with the performance test methods and procedures for $SO_2$. For the boiler **(ID No. ESB5)** where the Permittee seeks to demonstrate compliance with the fuel sulfur limit under Section 2.1 D.4.b, above, based on fuel supplier certification when firing No. 2 fuel oil, the initial performance test shall consist of the certification from the fuel supplier as described in Section 2.1 D.4.i, below.
[40 CFR 60.44c(g) and (h)]

If the results of initial performance test are above the fuel sulfur limit in Section 2.1 D.4.b, above or initial performance test is not conducted, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

**Monitoring** [15A NCAC 02Q .0508(f)]

i. To demonstrate compliance with the fuel sulfur limit in Section 2.1 D.4.b, above, the Permittee shall conduct the monitoring as follows,

When No. 2 fuel oil is fired in the boiler **(ID No. ESB5)**, $SO_2$ emissions shall be monitored through fuel supplier certifications containing the information specified in paragraphs (A) through (D), below.

(A) the name of the oil supplier;
(B) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR 60.41c;
(C) the sulfur content or maximum sulfur content of the oil; and
(D) a certified statement signed by the Permittee that the records of fuel supplier certification submitted represents all of the No. 2 fuel oil fired in the boiler **(ID No. ESB5)** during the semiannual reporting period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if sulfur dioxide emissions are not monitored as described above.

j. The Permittee shall submit the written site-specific monitoring plan to DAQ for approval for burning No. 2 fuel oil in this source (**ID No. ESB5**). This monitoring plan shall indicate procedures and criteria for establishing and monitoring specific parameters for this boiler indicative of compliance with the opacity standard. The Permittee shall operate the boiler according to an approved written site-specific monitoring plan. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the written site-specific plan when burning No. 2 fuel oil in the boiler is not submitted to DAQ or the Permittee is not operating the boiler in accordance with the approved site-specific monitoring plan. [40 CFR 60.47c(f)(3)]

**Recordkeeping** [15A NCAC 02Q .0508(f)]

k. For boiler (**ID No. ESB5**), subject to the $SO_2$ emission limits and fuel oil sulfur limits, under 40 CFR 60.42c, the Permittee shall keep records including the following information.
   i. Calendar dates covered in the reporting period.
   ii. Records of No. 2 fuel oil supplier certification as specified in Section 2.1 D.4.i, above.
   iii. The Permittee shall maintain records according to the site-specific monitoring plan in Section 2.1 D.4.j, above.

l. The Permittee shall record and maintain records of the amount of each fuel (No. 2 fuel oil, natural gas) combusted during each operating day. For natural gas, the Permittee can elect to record and maintain records of the amount of these fuels combusted during each calendar month.

m. All records required under 40 CFR 60.48c (Section 2.1 D.4.k. and D.4.l. above) shall be maintained by the Permittee for a period of two years following the date of such record. If the records are not kept for a period of two years following the date of such record, or if the records indicate the exceedance of applicable sulfur dioxide and opacity standards when burning No. 2 fuel oil, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.48c]

n. The Permittee shall maintain records according to the requirements specified in the following paragraphs, as applicable to the visible emissions monitoring method used.
   i. For each performance test conducted using Method 9 of appendix A–4 of 40 CFR Part 60, the Permittee shall keep the records including the information specified below.
      (A) Dates and time intervals of all opacity observation periods;
      (B) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
      (C) Copies of all visible emission observer opacity field data sheets;
   ii. For each performance test conducted using Method 22 of appendix A–4 of 40 CFR Part 60, the Permittee shall keep the records including the information specified in the following paragraphs.
      (A) Dates and time intervals of all visible emissions observation periods;
      (B) Name and affiliation for each visible emission observer participating in the performance test;
      (C) Copies of all visible emission observer opacity field data sheets; and
      (D) Documentation of any adjustments made and the time the adjustments were completed to the boiler **(ID No. ESB5)** operation by the Permittee to demonstrate compliance with the applicable monitoring requirements.

**Reporting** [15A NCAC 02Q .0508(f)]

o. For the boiler (**ID No. ESB5**), subject to the opacity limits in Section 2.1 D.4.c, above, the Permittee shall submit excess emission reports for any excess emissions from the boiler **(ID No. ESB5)** that occur during the reporting period.

p. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor of the sulfur content of the No. 2 fuel oil fired postmarked on or before January 30 for each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The summary report shall contain the following information:
   i. The information in Section 2.1 D.4.k, above.
   ii. The information required for the fuel supplier certification when firing No. 2 fuel oil in the boiler **(ID No. ESB5)**, as specified in Section 2.1 D.4.i, above. The report shall include a certified statement signed by the Permittee that the records of fuel supplier certifications submitted represent all of the No. 2 fuel oil combusted during the reporting period.

**5. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the boiler **(ID No. ESB5)** shall discharge into the atmosphere less than 15 tons of particulate matter ($PM/PM_{10}$) per consecutive 12-month period. [15A NCAC 02D .0530]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. Monitoring/Recordkeeping requirements for burning of No. 2 fuel oil on a facility wide basis in Section 2.2 A.4.c and A.4.d, below, shall be sufficient to ensure compliance with 15A NCAC 02D .0530. If the monitoring/ recordkeeping requirements in Section 2.2 A.4.c and A.4.d, below, are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

d. No monitoring/recordkeeping is required for particulate matter ($PM/PM_{10}$) emissions from burning of natural gas in source **(ID No. ESB5).**

**6. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the boiler **(ID No. ESB5)** shall discharge into the atmosphere less than 10 tons of $PM_{2.5}$ per consecutive 12-month period. [15A NCAC 02D .0530]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.6.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. Monitoring/Recordkeeping requirements for No. 2 fuel oil on a facility wide basis in Section 2.2 A.4.c and A.4.d, below, shall be sufficient to ensure compliance with 15A NCAC 02D .0530. If the monitoring/recordkeeping requirements in Section 2.2 A.4.c and A.4.d, below, are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

d. No monitoring/recordkeeping is required for $PM_{2.5}$ emissions from burning of natural gas in the boiler **(ID No. ESB5)**.

**Reporting** [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the previous six-month period between July and December and July 30 of each calendar year for the previous six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

f. Reporting requirements in Section 2.2 A.4.d, below, for burning of No. 2 fuel oil on a facility wide basis shall be sufficient to ensure compliance with 15A NCAC 02D .0530.

g. No reporting is required for $PM_{2.5}$ emissions from burning of natural gas in boiler **(ID No. ESB5)**.

**7. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. In order to avoid applicability of 15A NCAC 02D .0530(g), sulfuric acid mist emissions from this boiler **(ID No. ESB5)** shall be less than 7 tons per consecutive 12-month period. [15A NCAC 02D .0530]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.7.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. Monitoring/Recordkeeping requirements for the burning of No. 2 fuel oil on a facility wide basis in Section 2.2 A.4.c and A.4.d, below, shall be sufficient to ensure compliance with 15A NCAC 02D .0530. If the monitoring/ recordkeeping requirements in Section 2.2 A.4.c and A.4.d, below, are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

d. No monitoring/recordkeeping is required for sulfuric acid mist emissions from burning of natural gas in source **(ID No. ESB5).**

**Reporting** [15A NCAC 02Q .0508(f)]

e. Reporting requirements in Section 2.2 A.4.d, below, for burning of No. 2 fuel oil on a facility wide basis shall be sufficient to ensure compliance with 15A NCAC 02D .0530.

f. No reporting is required for sulfuric acid mist emissions from burning of natural gas in source **(ID No. ESB5)**.

**E. One diesel fuel-fired emergency fire engine (197 bhp) – equipped with a diesel particulate filter (ES33)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Sulfur dioxide | 2.3 pounds per million Btu heat input | 15A NCAC 02D .0516 |
| Visible emissions | 20 percent opacity | 15A NCAC 02D .0521 |
| Nitogen oxides, Carbon monoxide, Particulate matter, Nonmethane hydrocarbons, and Fuel sulfur content | See condition 2.1 E.3. | 15A NCAC 02D .0524 [40 CFR Part 60, Subpart IIII] |
| Toxic Air Pollutants | See Section 2.2 A.1. **State-enforceable only** | 15A NCAC 02D .1100 |
| Hazardous Air Pollutants | Maximum Achievable Control Technology | 15A NCAC 02D .1111 [40 CFR Part 63, Subpart ZZZZ] |
| Odorous emissions | See Section 2.2 A.2. **State-enforceable only** | 15A NCAC 02D .1806 |
| Sulfur dioxide | Facility-wide less than 250 tons per consecutive 12-month period See Section 2.2 A.3. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Nitrogen oxides (as $NO_2$) | Facility-wide less than 250 tons per consecutive 12-month period See Section 2.2 A.4. | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Volatile organic compounds | Facility-wide less than 250 tons per consecutive 12-month period See Section 2.2 A.5. | 15A NCAC 02Q .0317 (PSD Avoidance) |

**1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

a. Emissions of sulfur dioxide from the emergency fire engine **(ID No. ES33)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the emergency fire engine **(ID No. ES33)**.

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

a. Visible emissions from the emergency fire engine **(ID No. ES33)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the emergency fire engine **(ID No. ES33)**.

**3. 15A NCAC 02D .0524: NSPS, STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES [40 CFR Part 60, Subpart IIII]**
(for emergency internal combustion engines/fire pump engines)

**Applicability** [15A NCAC 02Q .0508(f), 40 CFR 60.4200(a)(2)]

a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, including Subpart A "General Provisions" for the emergency fire engine **(ID No. ES107).**

**General Provisions** [15A NCAC 02Q .0508(f)]

b. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60, Subpart IIII. [40 CFR 60.4218]

**Emission Standards** [15A NCAC 02Q .0508(f)]

c. The Permittee shall comply with the fire pump stationary CI ICE emission standards for the same model year and maximum NFPA nameplate engine power as the emergency fire engine **(ID No. ES33)** as follows:

| | |
|---|---|
| NMHC and $NO_X$: | 4.0 g/kW-hr; |
| CO: | 3.5 g/kW-hr; and |
| PM: | 0.20 g/kW-hr; |

[40 CFR 60.4205(c) and 60.4211(c) and Table 4 to Subpart IIII]

**Fuel Requirements** [15A NCAC 02Q .0508(f)]

d. The Permittee shall use diesel fuel in the emergency fire engine **(ID No. ES33)** with:
   i. a maximum sulfur content of 15 ppm; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b), and 40 CFR 80.510(b)]

**Testing** [15A NCAC 02Q .0508(f)]

e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limits given in Sections 2.1 E.3.c and d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

**Monitoring** [15A NCAC 02Q .0508(f)]

f. The engine **(ID No. ES33)** shall be equipped with a non-resettable hour meter. [40 CFR 60.4209(a)]

**Compliance Requirements** [15A NCAC 02Q .0508(f)]

g. The Permittee shall:
   i. operate and maintain the engine **(ID No. ES33)** in accordance with the manufacturer's written instructions over the entire life of the engine.
   ii. only change engine settings that are permitted by the manufacturer.

iii. meet the applicable requirements of 40 CFR 89, 94 and/or 1068.
[40 CFR 60.4206 and 60.4211(a)]

h. The Permittee shall comply with the emission standards specified Section 2.1 E.3.c, above, by purchasing an engine certified to the emission standards in Section 2.1 E.3.c. The engine must be installed and configured according to the manufacturer's specifications, except as permitted in the following paragraphs. [40 CFR 60.4211(c) and (g)(2)]
   i. If the Permittee does not install, configure, operate, and maintain the emergency fire engine **(ID No. ES33)** according to the manufacturer's emission-related written instructions, or the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall:
      (A) keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
      (B) conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year after the emergency fire pump **(ID No. ES33)** is no longer installed, configured, operated and maintained in accordance with the manufacturer's written instructions, or within one year after the Permittee changes emission-related settings.
   ii. The Permittee shall follow the applicable testing requirements specified in 40 CFR 60.4212 if the emergency fire pump **(ID No. ES33)** is no longer installed, configured, operated and maintained in accordance with the manufacturer's written instructions or the Permittee changes emission-related settings.

i. The Permittee shall install the diesel particulate filter with a backpressure monitor that notifies the Permittee when the high backpressure limit of the emergency fire engine **(ID No. ES33)** is approached.

j. In order for the emergency fire engine **(ID No. ES33)** to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii) of Section 2.1 E.3.j, below, is prohibited. If the engine is not operated according to the requirements in paragraphs (i) through (iii) below, the engine will not be considered an emergency engine under this permit condition and must meet all requirements for non-emergency engines.
   i. There is no time limit on the use of the emergency fire engine **(ID No. ES33)** in emergency situations.
   ii. The Permittee may operate the emergency fire engine **(ID No. ES33)** for any combination of the purposes specified in paragraphs (ii)(A) through (C) of Section 2.1 E.3.j, above for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (iii) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (ii).
      (A) The emergency fire engine **(ID No. ES33)** may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the DAQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
      (B) The emergency fire engine **(ID No. ES33)** may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
      (C) The emergency fire engine **(ID No. ES33)** may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency
   iii. The emergency fire engine **(ID No. ES33)** may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (ii) of Section 2.1 E.3.j. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

   [40 CFR 60.4243(d)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the compliance requirements above are not met.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

k. To ensure compliance, the Permittee shall perform inspections and maintenance on the emergency fire engine **(ID No. ES33)** as recommended by the manufacturer according to Section 2.1 E.3.f, above [40 CFR 60.4206 and 60.4211(a)]. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the engine; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.
   v. records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter required to be installed in Section 2.1. E.3.f. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time [40 CFR60.4214(b)];
   vi. records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached. [40 CFR60.4214(c)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

l. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

**4. 15A NCAC 02D .1111: 40 CFR Part 63, Subpart *ZZZZ*, "NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES"**

(New internal combustion engines located at major sources)

**Applicability** [40 CFR 63.6585, 63.6590(a)(2)]

a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart ZZZZ for the emergency fire engine **(ID No. ES33)**.

**Stationary RICE subject to Regulations under 40 CFR Part 60**

b. The emergency fire engine (**ID No. ES33**) shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart IIII. No further requirements apply for this engine under 40 CFR Part 63. If the requirements in Section 2.1 E.3, above, are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111. [40 CFR 63.6590(c)(6)]

# 2.2 Multiple Emission Source(s) Specific Limitations and Conditions

## A. Facility-wide affected sources

The following table provides a summary of limits and standards for the emission source(s) describe above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Toxic air pollutants | Modeled emission rates<br>**State-enforceable only** | 15A NCAC 02D .1100 |
| Odor | Odorous emissions must be controlled<br>**State-enforceable only** | 15A NCAC 02D .1806 |
| Sulfur dioxide | Facility-wide emissions less than 250 tons per consecutive 12-month period | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Nitrogen oxides (as $NO_2$) | Facility-wide emissions less than 250 tons per consecutive 12-month period | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Volatile organic compounds | Facility-wide emissions less than 250 tons per consecutive 12-month period | 15A NCAC 02Q .0317 (PSD Avoidance) |
| Toxic air pollutants | Facility wide emissions limits for toxic air pollutant emission rates<br>**State-enforceable only** | 15A NCAC 02Q .0711 |

**State-Enforceable Only**

**1. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS**

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded.

i. Facility wide (combined total of all permitted emission sources)

| Pollutant (CAS Number) | Emission Limits | | |
|---|---|---|---|
| | lbs/yr | lbs/day | lbs/hr |
| Arsenic and inorganic arsenic compounds | 2.42 | | |
| Cadmium (7440-43-9) | 57.88 | | |
| Benzene (71-43-2) | 1262.79 | | |
| Beryllium (7440-41-7) | 43.15 | | |
| Formaldehyde (50-00-0) | | | 5.04 |
| Nickel metal (7440-02-0) | | 10.03 | |
| Fluorides | | 26.75 | 8.40 |

ii. Source-by-Source

| Emission Source | Toxic Air Pollutant | Emission Limit(s) |
|---|---|---|
| Boiler (ID No. ESB4) | n-Hexane (110-54-3) | 3.792 lbs/day |
| Boiler (ID No. ESB5) | n-Hexane (110-54-3) | 2.59 lbs/day |
| Dryer (ID No. ES23) | n-Hexane (110-54-3) | 0.936 lb/day |
| Dryer (ID No. ES24) | n-Hexane (110-54-3) | 0.936 lb/day |
| Vapor Recovery System (ID No. ES17) | n-Hexane (110-54-3) | 302.4 lbs/day |
| Soybean Meal Cooler Portion (ID No. ES12) | n-Hexane (110-54-3) | 100.8 lbs/day |
| Soybean Meal Dryer Portion (ID No. ES12) | n-Hexane (110-54-3) | 489.6 lbs/day |

| Emission Source | Toxic Air Pollutant | Emission Limit(s) |
|---|---|---|
| Soybean Extraction Process (fugitive emissions) (ID No. ES17A) | n-Hexane (110-54-3) | 547.2 lbs/day |

b. The Permittee has submitted a toxic air pollutant dispersion modeling analysis dated November 30, 2010 for the facility's toxic air pollutant emissions as listed in the above table. The modeling analysis was reviewed and approved by the AQAB on December 14, 2010. Placement of the emission sources, configuration of the emission points, and operation of the sources shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memo.

**Testing** [15A NCAC 02D .0605]

c. Monitoring/Recordkeeping requirements in Section 2.2 A.3.c and A.3.d, below, shall be sufficient to ensure compliance with 15A NCAC 02D .1100.

**Monitoring/Recordkeeping/Reporting** 15A NCAC 02D .0605]

d. Reporting requirements in Section 2.2 A.3.e, below, shall be sufficient to ensure compliance with 15A NCAC 02D .1100.

**2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

**3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the facility-wide sources shall discharge to the atmosphere less than 250 tons of sulfur dioxide ($SO_2$) per consecutive 12-month period. [15A NCAC 02D .0530]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. The amounts of natural gas, No. 2 fuel oil burned on a facility wide basis shall not exceed 1,818 million $ft^3$/year and 300,000 gallons/year respectively.

d. The Permittee shall keep monthly records in a logbook (written or electronic format) of the amounts of natural gas and No. 2 fuel oil burned on a facility wide basis. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of each of the above fuels burned on a facility wide basis are not monitored or if the amounts of natural gas and No. 2 fuel oil burned on a facility wide basis exceed 1,818 million $ft^3$/year and 300,000 gallons/year respectively.

**Reporting** [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the previous six-month period between July and December and July 30 of each calendar year for the previous six-month period between January and June. The report shall contain the monthly amounts of natural gas and No. 2 fuel oil burned on a facility wide basis. The amounts of each of the above fuels burned must be reported on a facility wide basis for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

**4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the facility-wide sources shall discharge to the atmosphere less than 250 tons nitrogen oxides (as $NO_2$) per consecutive 12-month period. [15A NCAC 02D .0530]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. Monitoring/Recordkeeping requirements in Section 2.2 A.3.c and A.3.d, above, shall be sufficient to ensure compliance with 15A NCAC 02D .0530. If the monitoring/recordkeeping requirements in Section 2.2 A.3.c and A.3.d, above, are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Reporting** [15A NCAC 02Q .0508(f)]

d. Reporting requirements in Section 2.2 A.3.e, above, shall be sufficient to ensure compliance with 15A NCAC 02D .0530.

**5. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the facility-wide sources shall discharge into the atmosphere less than 250 tons VOC per consecutive 12-month period. [15A NCAC 02D .0530]

**Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

c. The Permittee shall maintain records of each monthly calculation of the VOC emitted from each emissions unit for each consecutive 12-month period. If these monitoring/recordkeeping are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

**Reporting** [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the previous six-month period between July and December and July 30 of each calendar year for the previous six-month period between January and June. The report shall contain the monthly VOC emissions calculations on a facility wide basis. The amounts of each of the VOC emissions must be reported on a facility wide basis for each of the 12-month periods over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

**B. The soybean oil production process, including:**

**The soybean oil/hexane solvent extraction process, including the vapor recovery system on the hexane application process (final vent; ID No. ES17)**
**The soybean extraction process (fugitive emissions; ID No. ES17A)**
**Soybean meal cooler/dryer unit (ID No. ES12) with associated parallel cyclones (ID Nos. CD12A through CD12C)**
**Soybean preparation process (ID No. ES14) with associated cyclones (ID Nos. CD14A and CD14B) installed in series with one bagfilter (ID No. CD14C)**
**Meal grinding and screening process (ID No. ES15) with associated bagfilter (ID No. CD15)**
**Hull grinding process (ID No. ES16) with associated bagfilter (ID No. CD16B)**
**Flaking rolls aspiration system (ID No. ES18) with associated cyclone (ID No. CD18)**
**Soybean meal storage tank with four loadouts (ID No. ES20) with associated bagfilter (ID No. CD20A)**
**Whole soybean storage tank (ID No. ES21) with associated bagfilter (ID No. CD21)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| Hazardous air pollutants | National Emission Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production | 15A NCAC 02D .1111 (40 CFR 63 GGGG) |

**1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

**Applicability**

a. Upon recommencement of operation, the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20, and ES21)** shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standards 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart GGGG "National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production" including Subpart A "General Provisions." [40 CFR 63.2832]

**Definitions And Nomenclature**

b. For purposes of this permit condition, definitions and nomenclature contained in 40 CFR 63.2872 shall apply.

**Regulated Pollutants**

c. Hazardous Air Pollutants (HAPs) as defined in 40 CFR 63.2872.

**Compliance Dates For Existing Sources** [40 CFR 63.2834]

d. The Permittee shall comply with this subpart by **April 12, 2004**. The Permittee shall operate the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20, and ES21)** in accordance with this subpart and pursuant to the Compliance Plan developed in accordance with Section 2.2 B.1.g., below, and to the SSM Plan developed in accordance with Section 2.2 B.1.h., below.

**Emission Requirements** [40 CFR 63.2840]

e. For the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20, and ES21)**, the Permittee shall comply with the requirements specified in Sections 2.2 B.1.e.i through B.1.e.iii., below, or the requirements specified in Section 2.2 B.1.e.iv., below.

Compliance Ratio Option

i. For each operating month, the Permittee shall calculate a compliance ratio which compares actual HAP loss to allowable HAP loss for the previous 12 operating months. An operating month, as defined according to Section 2.2 B.1.b. above, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under a malfunction period subject to Section 2.2 B.1.f.iii(B), below. The compliance ratio, as a function of total solvent loss, shall be calculated as follows [40 CFR 63.2842(a), Equation 2 of 40 CFR 63.2842]:

$$Compliance\ Ratio = \frac{f * Actual\ Solvent\ Loss}{0.64 * \sum_{i=1}^{n}[(Oilseed)_i * (SFL)_i]}$$

| | | | |
|---|---|---|---|
| Where: | Compliance Ratio | = | The ratio of actual HAP loss and allowable HAP loss in gallons of HAP lost per ton of listed oilseed processed. [40 CFR 63.2840(a)(1) ] |
| | F | = | The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in Section 2.2 B.1.i.(C), below, dimensionless. |
| | 0.64 | = | The average volume fraction of HAP in solvent in the baseline performance data, dimensionless. |
| | Actual Solvent Loss | = | Gallons of actual solvent loss during previous 12 operating months, as determined in Section 2.2 B.1.e.(B), below. |
| | Oilseed | = | Tons of each oilseed type "i" processed during the previous 12 operating months, as shown in Section 2.2 B.1.i.(D), below. |
| | SLF | = | 0.2, the corresponding solvent loss factor (gal/ton) for oilseed "i," for conventional soybean processing (i.e., uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products), at existing sources. [40 CFR 63.2840, Table 1] |

(A) An operating month is defined as any calendar month in which the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is processing soybean, or other listed oilseed.
   (1) If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is operating during a malfunction period subject to Section 2.2 B.1.f.iii, below, for the entire calendar month, the month is not an operating month.
   (2) An operating month may include time intervals characterized by several types of operating statuses, defined in Section 2.2 B.1.e.i(B)(3), below.
   (3) An operating month must have at least one normal operating period, as defined in Section 2.2 B.1.e.i(B)(3)(a), below.
   [40 CFR 63.2872]

(B) The Permittee shall determine the actual solvent loss from the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** following the procedures in the plan for demonstrating compliance ratio, as described in Section 2.2 B.1.e.i, below. The Permittee shall determine the actual solvent loss by the end of each calendar month following an operating month. The Permittee shall also determine the 12 operating months' rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months.
   (1) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. The Permittee shall not include losses in the actual solvent loss determination that occur during nonoperating periods as, defined in Section 2.2 B.1.e.i(B)(3); exempt operation periods, as defined in Section 2.2 B.1.e.i(B)(3); and malfunction periods, as specified in Section 2.2 B.1.f.iii. If any of these operating status periods span an entire month, then the month is treated as nonoperating and the Permittee shall not determine the compliance ratio for that month. [40 CFR 63.2853(c)]
   (2) The Permittee shall define each operating status period during the calendar month. The Permittee shall define the beginning of the operating status period as the first day of a calendar month. The Permittee shall define the end of the operating status period as the date of any change in the source operating status, as defined in Section 2.2 B.1.e.i(B)(3), or the last day of the calendar month, whichever is earlier. [40 CFR 63.2853(a)(1)]
   (3) The Permittee shall categorize the operating status of the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** for each recorded time interval as follows:
      (a) A normal operating period is defined as a time interval during which the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is processing any amount of soybean or other listed oilseed and not operating under a malfunction period, subject to Section 2.2 B.1.f.iii, below.
      (b) A nonoperating period is defined as a time interval during which the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20and ES21)** is not processing an agricultural product and not operating under a malfunction period, subject to Section 2.2 B.1.f.iii, below.
      (c) A malfunction period is defined as a time interval during which the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is operating under a malfunction period subject to Section 2.2 B.1.f.iii, below.

(d) An exempt period is defined as a time interval during which the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is processing agricultural products not defined as a listed oilseed.
[40 CFR 63.2853(a)(2) and Table 1 to 63.2853]

(4) The Permittee shall measure and record the solvent inventory on the beginning and ending dates of each normal operating period, as defined in Section 2.2 B.1.e.i(B)(3)(a), above, that occurs during an operating month.
[40 CFR 63.2853(a)(3)]

(5) The Permittee shall record the total gallons of extraction solvent received in each delivery.
[40 CFR 63.2853(a)(4)]

(6) The Permittee shall provide a reasonable justification for any solvent inventory adjustments made due to solvent losses determined directly from measured solvent inventory and quantity of solvent received not being an accurate estimate of the actual solvent loss.
[40 CFR 63.2853(a)(5)]

(7) The Permittee shall use the following equation to determine the actual solvent loss for all normal operating periods recorded within a calendar month.

$$\underset{(gal)}{Monthly\ Actual\ Solvent\ Loss} = \sum_{i=1}^{n} (SOLV_B - SOLV_E + SOLV_R \pm SOLV_A)_i$$

Where:
- $SOLV_B$ = Gallons of solvent in the inventory at the beginning of normal operating period "i" as determined in Section 2.2 B.1.e.i(B)(4)
- $SOLV_E$ = Gallons of solvent in the inventory at the end of normal operating period "i" as determined in Section 2.2 B.1.e.i(B)(4).
- $SOLV_R$ = Gallons of solvent received between the beginning and ending inventory dates of normal operating period "i" as determined in Section 2.2 B.1.e.i(B)(5).
- $SOLV_A$ = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i" as determined in Section 2.2 B.1.e.i(B)(5).
- n = Number of normal operating periods in a calendar month.

(C) The Permittee shall determine the weighted average volume fraction of HAP in extraction solvent received for use in the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**.

(1) By the end of each calendar month following an operating month, the Permittee shall determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating month.

(2) The Permittee shall determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months.

(3) The Permittee shall determine the volume fraction of HAP in the extraction solvent as a 12 operating months weighted average using the following:

(a) The volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent.
[40 CFR 63.2854(b)]

(b) To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of 40 CFR part 63. The Permittee may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content, including MSDS or manufacturer's certificate. The Permittee is not required to test the materials that are used, but the DAQ may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.
[40 CFR 63.2854(b)(1)]

(c) The Permittee shall determine the weighted average volume fraction of HAP in the extraction solvent each operating month using the following equation:

$$\begin{matrix} Monthly\ Weighted \\ Average\ of\ HAP\ content \\ of\ Extraction\ Solvent \end{matrix} = \frac{\sum_{i=1}^{n}(Received_i * Content_i)}{Total\ Received}$$

| | | | |
|---|---|---|---|
| Where: | Monthly Weighted Average HAP Content of Extraction Solvent | = | The volume fraction of HAP for an operating month, including all solvent received since the end of the last operating month, regardless of the operating status at the time of delivery. |
| | $Received_i$ | = | Gallons of extraction solvent received in delivery "i." |
| | $Content_i$ | = | The volume fraction of HAP in extraction solvent delivery "i." |
| | Total Received | = | Total gallons of extraction solvent received since the end of the previous operating month. |
| | N | = | Number of extraction solvent deliveries since the end of the previous operating month. |

[40 CFR 63.2854(b)(2)]

(d) The Permittee shall determine the volume fraction of HAP in the extraction solvent as a 12 operating months weighted average, using the following equation:

$$\begin{matrix} 12-month\ Weighted \\ Average\ of\ HAP\ content \\ of\ Extraction\ Solvent \end{matrix} = \frac{\sum_{i=1}^{12}(Received_i * Content_i)}{Total\ Received}$$

| | | | |
|---|---|---|---|
| Where: | 12-month Weighted Average of HAP Content in Solvent Received | = | The volume fraction of HAP as a 12 operating months weighted average. |
| | $Received_i$ | = | Gallons of extraction solvent received in delivery "i" as determined as specified in Section 2.2 B.1.e.i(B)(5). |
| | $Content_i$ | = | The volume fraction of HAP in extraction solvent received in operating month "i," as determined in accordance with Section 2.2 B.1.e.i(C)(3)(b), above. |
| | Total Received | = | Total gallons of extraction solvent received during the previous 12 operating months. |

[40 CFR 63.2854(b)(3)]

(D) The Permittee shall determine the quantity of each oilseed processed in the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** following the procedures in the plan for demonstrating compliance ratio, as described in Section 2.2 B.1.g, below. The Permittee shall determine the quantity of oilseed processed by the end of each calendar month following an operating month. The Permittee shall also determine the 12 operating months rolling sum of each type of oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months.

(1) The quantity of oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 months. The Permittee shall not include quantities of oilseed processed during nonoperating periods as, defined in Section 2.2 B.1.e.i(B)(3)(b); exempt operation periods, as defined in Section 2.2 B.1.e.i(B)(3)(d); and malfunction periods, as specified in Section 2.2 B.1.f.iii(B). If any of these operating status periods span an entire month, then the month is treated as nonoperating and the Permittee shall not determine the compliance ratio for that month. [40 CFR 63.2855(c)]

(2) The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the month. The Permittee shall determine all oilseed measurements on an "as received" basis, using the oilseed chemical and physical characteristics as initially received, prior to any oilseed handling and processing.
[40 CFR 63.2855(a)]

(3) The Permittee shall use the operating status period defined in Section 2.2 B.1.e.i(B)(2), above.
[40 CFR 63.2855(a)(1)]

(4) The Permittee shall use the source operation status for each recorded time interval categorized in Section 2.2 B.1.e..i(B)(3), above.
[40 CFR 63.2855(a)(2)]

(5) The Permittee shall measure and record the oilseed inventory on the beginning and ending dates of each normal operating period, as defined in Section 2.2 B.1.e.i(D)(4), above, that occurs during an operating month.
[40 CFR 63.2855(a)(3)]

(6) The Permittee shall record the type of oilseed and tons of each shipment of oilseed received and added to the on-site storage.
[40 CFR 63.2855(a)(4)]

(7) The Permittee shall provide a reasonable justification for any oilseed inventory adjustments made due to the quantity of oilseed processed directly from measured oilseed inventory and quantity of oilseed received not being an accurate estimate of the tons of oilseed processed for use in determining compliance ratios.
[40 CFR 63.2855(a)(5)]

(8) The Permittee shall use the following equation to determine the quantity of oilseed type processed in the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** during normal operating periods recorded within a calendar month.

$$\begin{matrix} Monthly\ Quantity \\ of\ each\ Oilseed \\ Processed\ (tons) \end{matrix} = \sum_{i=1}^{n} (SEED_B - SEED_E + SEED_R \pm SEED_A)_i$$

Where:

| | | | |
|---|---|---|---|
| Monthly Quantity of each Oilseed Processed | | = | Quantity of each oilseed type processed during normal operating periods within a calendar month, tons. |
| $SEED_B$ | | = | Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in accordance with Section 2.2 B.1.e.i(D)(5). |
| $SEED_E$ | | = | Tons of oilseed in the inventory at the end of normal operating period "i" as determined in accordance with Section 2.2 B.1.e.i(D)(5). |
| $SEED_R$ | | = | Tons of oilseed received during normal operating period "i" as determined in accordance with Section 2.2 B.1.e.i(D)(6). |
| $SEED_A$ | | = | Tons of oilseed added or removed from the oilseed inventory during normal operating period "i" as determined in accordance with Section 2.2 B.1.e.i(D)(7). |
| n | | = | Number of normal operating periods in the calendar month during which this type oilseed was processed. |

[40 CFR 63.2855(b)]

ii. The Permittee shall calculate the compliance ratio by the end of each calendar month following an operating month using the equation in Section 2.2 B.1.e.i, above. When calculating the compliance ratio, the Permittee shall consider the conditions and exclusions in paragraphs (A) through (D), below:

(A) If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** processes any quantity of listed oilseeds in a calendar month and the source is not operating under a malfunction period subject to Section 2.2 B.1.f.iii., then the Permittee shall categorize the month as an normal operating month.
(B) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.
(C) If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a non-operating month. The Permittee shall exclude any non-operating months from the compliance ratio determination.
(D) If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is subject to a malfunction period in Section 2.2 B.1.f.iii, below, the Permittee shall exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.
[40 CFR 63.2840(b)]

iii. If the compliance ratio calculated in Section 2.2 B.1.e.i and B.1.e.ii, above, is less than or equal to 1.00, the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** was in compliance with the HAP emission requirements for the previous operating month. [40 CFR 63.2840(c)]

If the compliance ratio calculated in Section 2.2. B.1.e.i and B.1.e.ii., above, is greater than 1.00, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Low-HAP solvent option.

iv. For the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**, the Permittee shall exclusively use solvent where the volume fraction of each HAP comprises 1 percent or less by volume of the solvent (low-HAP solvent) in each delivery, and the Permittee shall meet the requirements in paragraphs (A) through (C), below.
(A) The Permittee shall determine the HAP content of the solvent in accordance with the specifications in Section 2.2 B.1.e.i(C).
(B) The Permittee shall maintain documentation of the HAP content determination for each delivery of the solvent at the facility at all times.
(C) The Permittee shall submit an annual compliance certification in as specified in Section 2.2 B.1.l. The certification should only include the information required under Section 2.2 B.1.l.i(A) and (B), and a certification indicating whether the source complied with all of the requirements in Section 2.2 B.1.e.iv(A) and (B), above.
[40 CFR 63.2840(e)]

v. The Permittee may change compliance options for the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** if a notice is submitted to the DAQ Regional Supervisor at least 60 days prior to changing compliance options. If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** changes from the low-HAP solvent option under Section 2.2 B.1.e.v, above, to the compliance ratio determination option under Section 2.2 B.1.e.i through B.1.e.iii, above, the Permittee shall determine the compliance ratio for the most recent 12 operating months beginning with the first month after changing compliance options.
[40 CFR 63.2840(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the emission requirements in Section 2.2 B.1.e, above, are not followed.

**Compliance Requirements for HAP Emission Standards** [40 CFR 63.2850]

f. The Permittee shall comply with the hazardous air pollutant emission standards according to the following.
i. General requirements. The Permittee shall comply with the following paragraphs for the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**:
(A) The Permittee shall submit the necessary notifications, as specified in Section 2.2 B.1.k.
(B) The Permittee shall develop and implement a plan for demonstrating compliance, as specified in Section 2.2 B.1.g below.
(C) The Permittee shall develop a written startup, shutdown and malfunction (SSM) plan, as specified in Section 2.2 B.1.h, below.

(D) The Permittee shall maintain all the necessary records used to demonstrate compliance with this condition, as specified in Section 2.2 B.1.i, below.
(E) The Permittee shall submit the applicable reports, as specified in Section 2.2 B.1.l, below.
[40 CFR 63.2850(a)]

ii. Existing sources under normal operation. The Permittee shall meet all of the requirements listed in Section 2.2 B.1.f.i and the following paragraphs.
(A) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6(e)]
(B) If using the compliance ratio determination compliance option in Section 2.2 B.1.e.i through B.1.e.iii, above, the Permittee shall comply the following conditions. The Permittee shall keep the records as specified in Section 2.2 B.1.i.ii and B.1.i.iii, below.
(1) The Permittee shall determine the extraction solvent loss (in gallons) as specified in Section 2.2 B.1.e.i(B), above.
(2) The Permittee shall determine the tons of each oilseed type processed by the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**, as specified in Section 2.2 B.1.e.i(D), above.
(3) By the end of the following calendar month, the Permittee shall determine the weighted average volume fraction of HAP in extraction solvent received, as specified in Section 2.2 B.1.e.i(C), above.
(4) **Reserved**
(5) By the end of the following calendar month, the Permittee shall determine the actual solvent loss, weighted average volume fraction HAP, oilseed processed, and compliance ratio for each 12 operating month period, as specified in Section 2.2 B.1.e.i through iii, above.
(6) The Permittee shall submit the notification of compliance status as specified in Section 2.2 B.1.l.b, below, or the annual compliance certification as specified in Section 2.2 B.1.l.i, below.
(7) The Permittee shall submit the deviation notification report as specified in Section 2.2 B.1.l.ii, below.
[40 CFR 63.2850(b) and Table 1 of Section 63.2850]

iii. Existing sources experiencing a malfunction. If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then the Permittee shall meet the requirements associated with one of the compliance options in the following paragraphs within 15 days of the beginning date of the malfunction:
(A) *Normal operation.* the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** must meet all of the requirements listed in Section 2.2 B.1.f.i, above, and one of the following options:
(1) Existing source normal operation requirements in Section 2.2 B.1.f.ii, above.
(2) New source normal operation requirements in 40 CFR 63.2850(c)(1).
(3) Normal operation requirements for sources that have been significantly modified in 40 CFR 63.2850(d)(1).
(B) *Malfunction period.* Throughout the malfunction period, the Permittee shall meet all of the requirements listed in Section 2.2 B.1.f.i and the following when the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is operating during a malfunction period.
(1) The Permittee shall meet the requirements in Section 2.2 B.1.f.ii(A), above. In addition, the general duty to minimize emissions requires the Permittee to reduce emissions from the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during periods of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in Section 2.2 B.1.h, below), review of operation and maintenance

records, and inspection of the source. Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(2) The Permittee shall minimize emissions to the extent practicable throughout the initial startup period. Such measures should be described in the SSM plan, as specified in Section 2.2 B.1.h, below.
(3) The Permittee shall determine an estimate of the extraction solvent loss, in gallons, from the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**, during the malfunction period. The Permittee shall record supporting documentation for the estimate.
(4) The Permittee shall meet the requirements of Section 2.2 B.1.f.ii.(B)(2), above.
(5) The Permittee shall include the HAP volume fraction in any solvent received during a malfunction period in the weighted average HAP determination for the next operating month.
(6) The DAQ may require the Permittee to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the malfunction period.
(7) The Permittee shall submit a periodic SSM report as specified in Section 2.2 B.1.l.iii, below.
(8) The Permittee shall submit an immediate SSM report as specified in Section 2.2 B.1.l.iv, below, only if the Permittee did not follow the SSM plan in Section 2.2 B.1.h, below.

(C) At the end of the malfunction period, the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** must then meet all of the requirements listed in Section 2.2 B.1.f.ii, above.
(D) Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this condition.

[40 CFR 63.2850, Table 1 to 40 CFR 63.2850, and 40 CFR 63.6(e)]

The Permittee shall be deemed in noncompliance with 15A NCAC .1111 if the compliance requirements in Section 2.2 B.1.f, above, are not followed.

**Monitoring/Recordkeeping** [40 CFR 63.2851, 63.2852, 63.2862 and 63.2863]

g. The Permittee shall comply with the following compliance plan requirements:
   i. The Permittee shall develop and implement a written plan for demonstrating compliance (Compliance Plan) that provides the detailed procedures (Monitoring, Recordkeeping and Reporting Requirements) that the Permittee shall follow to monitor, record and report data necessary for demonstrating compliance with Section 2.2 B.1.

   ii. The Permittee shall also incorporate the Compliance Plan by reference in the facility's Title V permit and keep the Compliance Plan on-site and readily available as long as the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** are operational.

   iii. The plan for demonstrating compliance (Compliance Plan) shall include the following items:
      (A) The name and address of the owner or operator.
      (B) The physical address of the vegetable oil production process.
      (C) A detailed description of all methods of measurement the Permittee will use to determine the solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
      (D) When each measurement will be made.
      (E) Examples of each calculation the Permittee will use to determine the compliance status of the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**. Include examples of how data measured with one parameter will be converted to other terms for use in compliance determination.
      (F) Example logs of how data will be recorded.
      (G) A plan to ensure that the data continue to meet compliance demonstration needs.

   iv. If the Permittee makes any changes to the Compliance Plan, then the Permittee shall keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The DAQ Regional Supervisor may require the Permittee to revise the plan for demonstrating compliance. The DAQ Regional Supervisor may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

   v. The Permittee shall describe the procedures for obtaining and recording data, and determining compliance under normal operations or a SSM subject to Section 2.2 B.1.f.iii.(B).

The Permittee shall be deemed in noncompliance with the Compliance Plan requirements in Section 2.2 B.1.g, above, are not followed.

h. The Permittee shall comply with the following Startup, Shutdown and Malfunction (SSM) Plan requirements:
   i. The Permittee shall develop a written SSM Plan in accordance with 40 CFR 63.6(e)(3) and implement the SSM Plan when applicable.
   ii. The SSM Plan shall provide the detailed procedures for operating and maintaining the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** to minimize emissions during a qualifying SSM event for which the Permittee chooses the malfunction period under Section 2.2 B.1.f.iii.(B).
   iii. The Permittee shall also keep the SSM Plan on-site and readily available as long as the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is operational.
   iv. The SSM plan shall specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions.

   [40 CFR 63.2852]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the SSM plan requirements ins Section 2.2 B.1.h, above, are not followed.

i. The Permittee shall comply with the following recordkeeping requirements:
   i. Both the compliance plan (as described in Section 2.2 B.1.g) and the SSM plan (as described in Section 2.2 B.1.h) shall be kept on-site and readily available as long as the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is operational.

   ii. If the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** processes any listed oilseed, the Permittee shall record the items in paragraphs (ii)(A) through (E) of this section:
      (A) For the solvent inventory, record the information in paragraphs (ii)(A)(1) through (8) of this section in accordance with the plan for demonstrating compliance under Section 2.2 B.1.g:
         (1) Dates that define the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** operating status period during a calendar month, as specified in Section 2.2 B.1.e.i.(B)(2).
         (2) The operating status of the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval, as specified in Section 2.2 B.1.e.i.(B)(3).
         (3) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period, as specified in Section 2.2 B.1.e.i.(B)(4).
         (4) The gallons of all extraction solvent received, purchased, and recovered during each calendar month, as specified in Section 2.2 B.1.e.i.(B)(5).
         (5) All extraction solvent inventory adjustments, additions or subtractions. The Permittee shall document the reason for the adjustment and justify the quantity of the adjustment as specified in Section 2.2 B.1.e.i(B)(6).
         (6) The total solvent loss for each calendar month, regardless of the source operating status.
         (7) The actual solvent loss in gallons for each operating month calculated as specified in Section 2.2 B.1.e.i(B)(7).
         (8) The actual solvent loss as a 12 operating months rolling sum of actual solvent loss in gallons, as specified in Section 2.2 B.1.e.i.(B)(7).

      (B) For the weighted average volume fraction of HAP in the extraction solvent, the Permittee shall record the items in paragraphs (ii)(B)(1) through (4) of this section:

         (1) The gallons of extraction solvent received in each delivery, as specified in Section 2.2 B.1.e.i.(B)(5).
         (2) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent, as specified in Section 2.2 B.1.e.i.(C)(3).
         (3) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance Section 2.2 B.1.e.i.(C).
         (4) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months, as specified in Section 2.2 B.1.e.i.(C)(3)(d).

(C) For each type of listed oilseed processed, the Permittee shall record the items in paragraphs (ii)(C)(1) through (7) of this section, in accordance with the plan for demonstrating compliance in Section 2.2 B.1.g:
(1) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory in Section 2.2 B.1.i.ii.(A)(1).
(2) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. The operating status must be the same as entered for the extraction solvent inventory in Section 2.2 B.1.i.ii.(A)(2). On the log for each type of listed oilseed that is not being processed during a normal operating period, the Permittee shall record which type of listed oilseed is being processed in addition to the source operating status.
(3) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period, as specified in Section 2.2 B.1.e.i.(D)(5).
(4) The tons of each type of listed oilseed received at an affected source each normal operating period, as specified in Section 2.2 B.1.e.i.(D)(1).
(5) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment, as specified in Section 2.2 B.1.e.i.(D)(7).
(6) The tons of each type of listed oilseed processed within a calendar month calculated as specified in Section 2.2 B.1.e.i.(D)(8).
(7) The 12 operating months rolling sum of each type of listed oilseed processed at the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** in tons, as specified in Section 2.2 B.1.e.i.(D).

iii. A determination of the compliance ratio using the values from Sections 2.2 B.1.e.i.(B), B.1.e.i.(C), and B.1.e.i.(D), and calculated using the equation for compliance ratio in Section 2.2 B.1.e.i.

iv. A statement of whether the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** is in compliance with all of the requirements of Section 2.2 B.1.

v. For each SSM event subject to a malfunction period, as described in Section 2.2 B.1.f.iii.(B), record the items in paragraphs v.(A) through (C) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
(A) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
(B) An estimate of the solvent loss in gallons for the duration of the malfunction period with supporting documentation, as specified in Section 2.2 B.1.f.iii.(B)(3).
(C) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the recordkeeping requirements in Section 2.2 B.1.i, above, are not followed.

j. The facility shall comply with the following recordkeeping requirements [40 CFR 63.2863]:
i. Your records must be in a form suitable and readily available for review in accordance with 40 CFR 63.10(b)(1).
ii. As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
iii. You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with 40 CFR 63.10(b)(1). You can keep the records off-site for the remaining 3 years.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records in Section 2.2 B.1.j. above, are not kept.

**Notifications/Reporting** [40 CFR 63.2860 and 63.2861]

k. The facility shall submit the following one-time notifications to the DAQ Regional Supervisor:
Significant modification notifications.
i. If the Permittee plans to undergo a significant modification two reports must be submitted, as described in the following paragraphs:

(A) Initial notification. The Permittee shall submit an initial notification to the DAQ Regional Supervisor 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification. The initial notification must include the items the following items:
(1) The expected startup date of the modified source.
(2) A description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors, desolventizer toasters (conventional and specialty), and meal dryer-coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.

(B) Notification of actual startup. The Permittee shall submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the following items:
(1) The initial startup date of the modified source.
(2) An indication whether the Permittee has elected to operate under an initial startup period subject to 40 CFR 63.2850(d)(2).
(3) The anticipated duration of any initial startup period.
(4) A justification for the anticipated duration of any initial startup period.

Notification of compliance status.

ii. The Permittee shall submit a notification of compliance status report to the DAQ Regional Supervisor no later than 60 days after determining your initial 12 operating months' compliance ratio. The Permittee shall submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in the following paragraphs:
(A) The name and address of the owner or operator.
(B) The physical address of the vegetable oil production process.
(C) Each listed oilseed type processed during the previous 12 operating months.
(D) Each HAP identified under Section 2.2 B.1.e.i.(C) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
(E) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
(F) A compliance certification indicating whether the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** complied with all of the requirements of Section 2.2 B.1 throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in following paragraphs:
(1) The plan for demonstrating compliance (as described in Section 2.2 B.1.g) and SSM plan (as described in Section 2.2 B.1.h) are complete and available on-site for inspection.
(2) The Permittee is following the procedures described in the plan for demonstrating compliance.
(3) The compliance ratio is less than or equal to 1.00.

[40 CFR 63.2860(c) and (d)

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if notifications in Section 2.2 B.1.k, above, are not submitted.

l. The Permittee shall submit the following reports to the DAQ Regional Supervisor at the appropriate time intervals.
Annual compliance certifications.

i. The Permittee shall submit the first annual compliance certification on or before 12 calendar months after submittal of the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (i)(A) through (F) of this section in the annual certification:
(A) The name and address of the owner or operator.
(B) The physical address of the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**.
(C) Each listed oilseed type processed during the 12 calendar months period covered by the report.

(D) Each HAP identified under Section 2.2 B.1.e.i.C) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
(E) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
(F) A compliance certification to indicate whether the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, The Permittee shall include a certification of the items in paragraphs (i)(F)(1) through (2) of this section:
(1) The Permittee is following the procedures described in the plan for demonstrating compliance.
(2) The compliance ratio is less than or equal to 1.00.

Deviation notification report.

ii. The Permittee shall submit a deviation report for each compliance determination made in which the compliance ratio exceeds 1.00 as determined under Section 2.2 B.1.e.iii, above. The Permittee shall submit the deviation report by the end of the month following the calendar month in which the deviation was determined. The deviation notification report must include the items in paragraphs (ii)(A) through (D) of this section:
(A) The name and address of the owner or operator.
(B) The physical address of the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)**.
(C) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.
(D) The compliance ratio comprising the deviation. The Permittee may reduce the frequency of submittal of the deviation notification report if the DAQ does not object as provided in 40 CFR 63.10(e)(3)(iii).

Periodic startup, shutdown, and malfunction report.

iii. If the Permittee chooses to operate the soybean oil production process **(ID Nos. ES12, ES14 through ES18, ES20 and ES21)** under a malfunction period subject to Section 2.2 B.1.f.iii(B), the Permittee shall submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs (iii)(A) through (C) of this section:
(A) The name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.
(B) A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.
(C) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.

Immediate SSM reports.

iv. If the Permittee handles a SSM during a malfunction period subject to Section 2.2 B.1.f.iii(B) differently from procedures in the SSM plan and the relevant emission requirements in Section 2.2 B.1.e.i are exceeded, then the Permittee shall submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the DAQ within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in paragraphs (iv)(A) through (C) of this section:
(A) The name, title, and signature of the Permittee's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.
(B) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.
(C) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reports in Section 2.2 B.1.l, above, are not submitted.

**C. One natural gas/No. 2 fuel oil/diesel fuel-fired rental boiler (ID No. ESB4)**
**One natural gas/No. 2 fuel oil-fired boiler (ID No. ESB5)**

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---|---|---|
| hazardous air pollutants | Work Practice Standards | MACT DDDDD |

**1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

Applicability [40 CFR 63.7485, 63.7490(d), 63.7499(l)]

a. For sources ID Nos. ESB4 and ESB5 (i.e., existing sources designed to burn gas 1 fuels, with oil during curtailment, with a heat input capacity equal to or greater than 10 million Btu per hour), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

c. The Permittee shall only burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, and during periods of gas curtailment or gas supply interruptions of any duration. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

d. The Permittee shall comply with the requirements of 40 CFR 63, Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7510(e), 63.56(b)]

e. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [40 CFR 63.7545(e), 63.7530(e) & (f)]

f. The Permittee shall submit a Notification of Compliance Status (NOCS). The notification must be signed by a responsible official and submitted by July 19, 2019. The notification shall contain the following:
   i. A description of the affected units including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuels burned.
   ii. the following certification(s) of compliance, as applicable:
      (A) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at the site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)' [i.e., Section 2.2 C. 1. h. i., and j. ii., of the permit, below]; and
      (B) "This facility has had an energy assessment performed according to 63.7530(e)" [ i.e., 2.2 C. 1. i., of the permit, below] and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.
      (C) "No secondary materials that are solid waste were combusted in any affected unit."

g. The Permittee shall submit a notification of intent to fire an alternative fuel (i.e., fuel oil) within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification must include the information in 40 CFR 63.7545(f). [40 CFR 63.7545(f)]

Work Practice Standards [15A NCAC 02Q .0508(f)]

h. i. The Permittee shall conduct a tune-up of the sources **annually** as specified below.
      (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection anytime prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown;
      (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);
(D) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any $NO_X$ requirement to which the unit is subject; and
(E) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[40 CFR 63.7500(a), 63.7540(a)(10)]

ii. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]
iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]
iv. At all times, The Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]
v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 C. 1. h., of the permit, above, are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

i. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR Part 63, Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in 63.7575: [40 CFR 63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

j. The Permittee shall keep the following:
i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
[40 CFR 63.7555(a)(1)]
ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
(A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the source;
(B) a description of any corrective actions taken as a part of the tune-up; and
(C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]
iii. the associated records for Section 2.2 C. 1. h., through 2.2 C. 1. i.,
iv. the following records, pursuant to 15A NCAC 02Q .0508(f) and 40 CFR 63.7555(h):
(A) types of fuels combusted during periods of gas curtailment, gas supply interruption, periodic testing maintenance and operator training;
(B) date and duration of periods of gas curtailment and gas supply interruption; and
(C) date and duration of periods of testing, maintenance and operator training while combusting liquid fuel.

k. The Permittee shall:
i. maintain records in a form suitable and readily available for expeditious review;

ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.7560, 63.10(b)(1)]

l. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in 2.2 C. 1. J., through k.,.

Reporting Requirements [15A NCAC 02Q .0508(f)]

m. The Permittee shall submit compliance reports to the DAQ on an annual basis. The first report shall cover the period beginning on May 20, 2019 and ending on December 31, 2019. The first report shall be postmarked on or before January 30, 2020. Subsequent annual reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding 12-month period. [40 CFR 63.7550(b)]
   i. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/)) The Permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, The Permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, The Permittee must submit the report to the Administrator at the appropriate address listed in 63.13. The Permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

n. The compliance report must contain the following information:
   i. company name and address;
   ii. process unit information, emissions limitations, and operating parameter limitations;
   iii. date of report and beginning and ending dates of the reporting period;
   iv. include the date of the most recent tune-up for each unit required according to Section 2.2 C. 1. h., of the permit, above. Include the date of the most recent burner inspection..
   v. statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
   [40 CFR 63.7550(a) and (c), Table 9]

o. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.2 C. 1. m., through 2.2 C. 1. n., of the permit, above are not met.

## 2.3 Permit Shield for Nonapplicable Requirements

The Permittee is shielded from the following nonapplicable requirements [15A NCAC 02Q .0512(a)(1)(B)].

A. The NSPS for Small Industrial-Commercial-Institutional Steam Generating units (40 CFR Part 63 Dc) and 15A NCAC 02D .0524 are not applicable to the natural gas/No. 2 fuel oil/diesel fuel-fired rental boiler **(ID No. ESB4)** because the boiler is a temporary boiler, as defined in §60.41c, provided the following criteria are met:
   1. The boiler only fires natural gas and distillate oil;
   2. The potential $SO_2$ emissions are equal to or less than 0.060 lb/MMBtu;
   3. The boiler is designed to, and is capable of, being carried or moved from one location to another and is not attached to a foundation; and
   4. The boiler remains at the location for 180 consecutive days or fewer (any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period).

B. The Permittee shall maintain the following records documenting that the natural gas/No. 2 fuel oil/diesel fuel-fired rental boiler **(ID No. ESB4)** meets the criteria for a temporary boiler. These records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
   1. the first, last and total number of days the boiler remains at the location;
   2. records of fuel usage in the boiler showing the type of fuel fired;

3. records of fuel sulfur content of distillate oil fired in the boiler; and;
4. the function of the boiler for each consecutive time period.

# SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the applicati
on and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**
The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]
The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
   a. a description of the change at the facility;
   b. the date on which the change will occur;
   c. any change in emissions; and
   d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

**List of Acronyms**

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|---|---|
| **AOS** | Alternative Operating Scenario |
| **BACT** | Best Available Control Technology |
| **Btu** | British thermal unit |
| **CAA** | Clean Air Act |
| **CAIR** | Clean Air Interstate Rule |
| **CEM** | Continuous Emission Monitor |
| **CFR** | Code of Federal Regulations |
| **DAQ** | Division of Air Quality |
| **DEQ** | Department of Environmental Quality |
| **EMC** | Environmental Management Commission |
| **EPA** | Environmental Protection Agency |
| **FR** | Federal Register |
| **GACT** | Generally Available Control Technology |
| **HAP** | Hazardous Air Pollutant |
| **MACT** | Maximum Achievable Control Technology |
| **NAA** | Non-Attainment Area |
| **NCAC** | North Carolina Administrative Code |
| **NCGS** | North Carolina General Statutes |
| **NESHAP** | National Emission Standards for Hazardous Air Pollutants |
| **$NO_X$** | Nitrogen Oxides |
| **NSPS** | New Source Performance Standard |
| **OAH** | Office of Administrative Hearings |
| **PM** | Particulate Matter |
| **$PM_{10}$** | Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less |
| **POS** | Primary Operating Scenario |
| **PSD** | Prevention of Significant Deterioration |
| **RACT** | Reasonably Available Control Technology |
| **SIC** | Standard Industrial Classification |
| **SIP** | State Implementation Plan |
| **$SO_2$** | Sulfur Dioxide |
| **tpy** | Tons Per Year |
| **VOC** | Volatile Organic Compound |